L Number	Hits	Search Text	DB	Time stamp
1	3	quatrepolymer (quatre adj polymer)	USPAT; US-PGPUB	2003/05/16 11:19
2	0	quatrepolymer (quatre adj polymer)	USOCR	2003/05/16 11:19
3	0	quatrepolymer (quatre adj polymer)	EPO; JPO; DERWENT; IBM_TDB	2003/05/16 11:19

US-PAT-NO: 4797323

DOCUMENT-IDENTIFIER: US 4797323 A

TITLE: Flame retardant wire with high insulation resistance

---------- KWIC ---------

Detailed Description Text - DETX (14):
Considering first the ingredients as listed in Table II, the polyolefin as used herein refers to polyethylene as a preferred component, but the polyolefin may also be copolymers of ethylene, including but not limited to ethylene ethyl acrylate, ethylene vinyl acetate copolymers, ethylene-butene copolymers, ethylene-propylene copolymers, terpolymers and quatrepolymers such as EPDM. Also, the polyolefin may be either of the high density or the low density polyethylene or may be polyallomer.

US-PAT-NO: 4382112

DOCUMENT-IDENTIFIER: US 4382112 A

TITLE: Flexible insulation with improved discoloration and heat age resistance

---------- KWIC ---------

Brief Summary Text - BSTX (3):
Flexible insulation is formed on wire and cable products by use of flexible base polymers such as ethylene-propylene-diene terpolymer, also known as EPDM. This EPDM is the ASTM designation for an ethylene-propylene terpolymers or a quatrepolymer. Two such quatrepolymers are the polymer products sold commercially as Nordel 2722 of DuPont and Nordel 2522 of DuPont. Other ethylene-propylene copolymers, terpolymers and quatrepolymers may be used in place of the specific EPDMs such as the Nordel 2000 Series of DuPont. Further illustrations of ethylene-propylene polymers which have been used in flexible insulation for wire and cable include the Vistalon 404 of the Exxon Chemical Americas Company, which is an ethylene-propylene copolymer. Further, the Nordel 1040, for example, and Nordel 1145 of the DuPont Company have been employed in making flexible wire insulation for wire and cable products. These latter DuPont products are ethylene-propylene terpolymers.

Brief Summary Text - BSTX (4):
The above and similar flexible polymers compositions have been incorporated as the base polymer of flexible wire insulation. Such flexible wire insulation

has been used in the temperature ranges of a 90.degree. C. wire rating, and a 105.degree. C. wire rating and some of them up to a 125.degree. C. wire rating, according to applicable UL standards. One of the problems which such compositions encounter as the compositions are employed at higher temperatures, is that there is a tendency for the compositions to discolor. In other words, as a generality, the compositions of flexible wire insulation which have the ethylene-propylene copolymer, terpolymer or quatrepolymer bases do have a tendency to discolor as the temperature of use or temperature of test of the compositions is raised. This tendency is present even though the compositions themselves may have some ingredients which permit them to be used at more elevated temperatures. For example, the composition of U.S. Pat. No. 4,125,509 does have substantial resistance to discoloration at relatively short test periods of about five hours. The composition of the U.S. Pat. No. 4,125,509 patent does have deteriorating properties when operated continuously at a 150.degree. C. range even though it does not discolor for short periods at this temperature.

Brief Summary Text - BSTX (11):

Another object is to provide a flexible wire insulation having an ethylene-propylene copolymer, terpolymer or quatrepolymer base which has improved resistance to discoloration on heating at elevated temperatures.

Detailed Description Text - DETX (2):

Improvements in the discoloration resistance and other properties at 150.degree. C. are achieved in an insulation composition having an ethylene-propylene copolymer, terpolymer or quatrepolymer

base and having two antioxidants present, one of which is ZMB and the other being Irgonox, by the addition of a relatively small quantity of a chlorinated polymer. The chlorinated polymer which is suitable for practice of the present invention may be chlorinated polyethylene or other saturated chlorinated polymer free of sulfur which is compatible and blendable with the ethylene-propylene copolymers and terpolymers and quatrepolymers of the flexible wire insulation composition for which improvement is sought.

Detailed Description Text - DETX (5):

In carrying out the present invention, a base polymer composition containing the ethylene-propylene copolymer, terpolymer or quatrepolymer is blended with a relatively small amount of a saturated chlorinated compatible polymer which is free of sulfur and the base material containing chlorinated polymer is formulated into a wire coating composition.

Detailed Description Text - DETX (6):

The polymer base ingredients which may be employed include the ethylene-propylene copolymers as well as the ethylene-propylene terpolymers and particularly those ethylene-propylene diene terpolymers which have relatively high degree of flexibility and which are suitable for use as wire coating insulation compositions. Also, the ethylene-propylene quatrepolymer materials are included within the group of base polymer materials for which improvement is sought.